

WHAT IS CLAIMED IS:

1. A method for bending a substantially plate-shaped, thermoplastic workpiece, comprising the steps of:

heating a bending region of the workpiece at least up to plasticization;

inserting a bending element into the workpiece up to an apex of a desired bend; and

bending the bending region about the bending element acting on the workpiece about a front end, relative to an insertion direction, of the inserted bending element.

2. The method according to claim 1, wherein the workpiece includes a sandwich panel.

3. The method according to claim 1, further comprising the step of heating the bending element.

4. The method according to claim 1, further comprising the steps of:

moving the bending element out of the workpiece after the bending step; and

sealing a gap that was created in the workpiece by the bending element in the inserting step.

5. The method according to claim 1, further comprising the step of repeating the heating, inserting and bending steps a plurality of times at various locations along the workpiece to generate a polyline.

6. A bending arrangement for hot bending a thermoplastic workpiece by a method that includes the steps heating a bending region of the workpiece at least up to plasticization, inserting a bending element into the workpiece up to an apex of a desired bend and bending the bending region about the bending element acting on the workpiece about a front end, relative to an insertion direction, of the inserted bending element, comprising:

a bending element heatable at least in a region configured to penetrate the workpiece and having a suitable shape configured for insertion into the at least plasticized workpiece.

7. The arrangement according to claim 6, wherein the bending element includes at least one of a flat bar and a tube.

10075942.021302